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Application No.: 10/017,805

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**REMARKS** 

**Present Status of the Application** 

The Office Action mailed September 11, 2003, rejected claims 1-14. Specifically, the

Office Action rejected claims 1-14 under 35 U.S.C. 102, as being anticipated by Ando et al (U.S.

Pat. No. 6,115,514A), and also rejected under 35 U.S.C. 102, as being anticipated by Yoshimura

et al (U.S. Pat. No. 5,917,980A). Applicant has amended claims 1, 5-14, and canceled claim 4

above for further clarifying the scope of the invention. Applicant respectfully submits that no

new matter is added by way of these amendments. As amended, these claims clearly distinguish

prior art, and therefore overcome the rejections under 35 U.S.C. 102. After entry of the

foregoing amendments, claims 1-3 and 5-14 remain pending in the present application, and

reconsideration of those claims is respectfully requested.

**Discussion of Office Action Rejections** 

Clams 1-14 were rejected under 35 U.S.C. 102(b) as being anticipated by Ando et al

(Ando, hereinafter). The Office Acton alleged that Ando has disclosed each and every claimed

feature of the invention. In response, Applicant respectfully disagree the rejection and its claim

interpretation for at least reasons set forth as follows.

Claim 1 of the present invention recites:

A photoresist adjustable to a polarized light for use in a

photolithography process, the photoresist comprising:

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a photosensitive polymer, wherein the photosensitive polymer is oriented to a specific direction under an electromagnetic field, and the photosensitive polymer comprises a photosensitive section for absorbing an exposure light to generate an optical reaction and an anti-etching section for increasing a resist force against a plasma etching, and the photosensitive polymer is able response to a polarized light according to an angle variation between the specific direction and a polarization direction of the polarized light changes.

Claim 1 of the invention provides features of a photoresist used in an photolithography process. The claimed photoresist comprises photosensitive polymer that can change its direction under an electromagnetic field. Furthermore, the polarized light changes the characteristic of the photosensitive polymer when the angle between specific direction (oriented angle of the polymer) and a polarization direction of the polarized light changes. These are features of the photoresist of the present invention.

However, the Ando reference related to an optical waveplate. In the Ando reference, the polymer is a substrate or a base for the waveplate. Therefore, the polymer base does not change its direction. The Ando's waveplate is used to change the direction of the incident polarized light, and is not used for the photolithography process.

In addition, in the present invention, the photosensitive polymer in the photoresist can react with the exposure light to conduct the photolithography process. But, the polymer base of

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waveplate of the Ando reference cannot react with the incident light because the waveplate will

be damaged and fails to function if the incident light reacts with the polymer base.

For at least the reasons set out above, Ando fails to disclose, teach or suggest any claimed

feature of the present invention. Applicant respectfully submits that claim 1 of the invention

clearly and patently defines over the Ando reference. Claims 2-3 and 5-14 dependent on

independent claim 1 should be also patently define over the Ando reference. Therefore, the

rejection under 35 U.S.C. 102(b) should be withdrawn and claims 1-3 and 5-14 should be

allowed.

Claims 1-14 were rejected under 35 U.S.C. 102(b), as being anticipated by Yoshimura et

al (Yoshimura, hereinafter). The Office Acton alleged that Ando has disclosed each and every

claimed feature of the invention. In response, Applicant respectfully disagree the rejection and its

claim interpretation for at least reasons set forth as follows.

Yoshimura discloses an optical circuit device for use in a waveguide. Therefore,

Yoshimura's disclosure cannot be reacted with the incident light when Yoshimura's optical

circuit device is used in the waveguide. However, in the present invention, the photosensitive

polymer in the photoresist can react with the exposure light to conduct the photolithography

process. The photosensitive polymer of the invention is sensitive to react with the incident light,

but the polymer of the Yoshimura reference cannot react with the incident light.

For use in the photolithography process, the photosensitive polymer further comprises "a

photosensitive section for absorbing an exposure light to generate an optical reaction and an anti-

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etching section for increasing a resist force against a plasma etching", and neither Ando nor

Yoshimura discloses, suggests or teaches this structure feature.

For at least the reasons set out above, Ando fails to disclose, teach or suggest any claimed

feature of the present invention. Applicant respectfully submits that claim 1 of the invention

clearly and patently defines over the Ando reference. Claims 2-3 and 5-14 dependent on

independent claim 1 should be also patently define over the Ando reference. Therefore, the

rejection under 35 U.S.C. 102(b) should be withdrawn and claims 1-3 and 5-14 should be

allowed.

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## CONCLUSION

For at least the foregoing reasons, it is believe that all pending claims 1-3 and 5-14 are in proper condition for allowance. If the Examiner believes that a conference would be of value in expediting the prosecution of this application, he is hereby invited to telephone the undersigned counsel to arrange for such a conference.

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Respectfully submitted,

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